In the Claims:

1. (Currently Amended) An electronic device comprising:

an array of micro-electromechanical system (MEMS) elements including at least first and second MEMS elements, said array being connected by an input and an output and providing a plurality of states at its output,

wherein each of the first and second MEMS elements has a characteristic hysteresis curve, a first state and a second state, and

wherein a transition from the first to the second state is effected by an opening voltage, and a transition from the second to the first state is effected by a closing voltage, the opening voltage and closing voltage of the first MEMS element being different from the opening voltage and closing voltage of the second MEMS element, and

wherein the characteristic hysteresis curves differing from the first MEMS element to the second MEMS element are designed such that the hysteresis curve having a smaller width is located fully within the width of the hysteresis curve having the larger width, and

wherein the input is adapted for applying a single control voltage that is to be applied to all the MEMS elements whereby the various states of the array are to be obtained by varying the single control voltage.

2. (Previously Presented) An electronic device as claimed in claim 1, wherein the array includes at least three MEMS elements each having a characteristic hysteresis curve, such that the opening voltage is different from the closing voltage, which

characteristic hysteresis curves and the corresponding opening and closing voltages differ from one MEMS element to another MEMS element.

3. (Original) The device of claim 1, wherein the MEMS elements in the array are connected in parallel.

4. (Original) The device of claim 1, wherein the number of MEMS elements in the array is in the range from 2 to 10.

5. (Previously Presented) The device of claim 1, wherein the input for a single control voltage is connected to a transistor.

6. (Original) The device of claim 1 comprising a plurality of arrays of MEMS elements, each array having an input for a single control voltage.

7. (Original) The device of claim 1, wherein each of the MEMS elements in the array has a fixed electrode and a movable electrode that is movable towards and away from the fixed electrode by application of the closing and the opening voltage respectively, such that in the first state the distance between the fixed and the movable electrode is smaller than in the second state, which movable electrode is suspended substantially parallel to the fixed electrode and anchored to a support structure by at least one cantilever arm having a spring constant, which MEMS element is provided with an actuation electrode with an actuation area for provision of the closing and opening voltages.

8. (Previously Presented) The device of claim 1, wherein the first and second MEMS elements in the array have different characteristic hysteresis curves in that actuation areas of control electrodes of the first and second MEMS elements are different and/or spring constants of cantilever arms are different.

9. (Original) The device of claim 7, wherein at least one dielectric layer having a dielectric permittivity is present between the fixed and the movable electrode, such that the MEMS element is a MEMS capacitor, of which capacitor the first state has a first state capacitance, and a first and a second MEMS capacitor in the array have different characteristic hysteresis curves in that the first state capacitances of the first and the second MEMS capacitor are different.

10. (Canceled)

11. (Previously Presented) The device of claim 1, wherein the characteristic hysteresis curves of the first and second MEMS elements are centered around a common centerline in the operational diagram.

12. (Original) Method for driving an array of micro-electromechanical system (MEMS) elements according to claim 1, wherein a single control voltage is applied in common to the MEMS elements in the array, which voltage is varied to obtain the various states of the array.

13. (Currently Amended) An electronic device comprising:

a first MEMS element having a first characteristic hysteresis curve and a first state

and a second state, a transition from the first to the second state being effected by a first opening voltage, and a transition from the second to the first state being effected by a first closing voltage;

a second MEMS element having a second characteristic hysteresis curve that is different than the first characteristic hysteresis curve, the second MEMS element ~~also~~ having a first state and a second state wherein a transition from the first to the second state is effected by a second opening voltage, and a transition from the second to the first state is effected by a second closing voltage, the second opening voltage being different than a first opening voltage and the second closing voltage being different than the first closing voltage, wherein the first characteristic hysteresis curve has a smaller width than the second characteristic hysteresis curve and wherein the first characteristic hysteresis curve is located fully within the second characteristic hysteresis curve; and

a single common input coupled to both the first MEMS element and the second MEMS element, wherein state transitions within the first MEMS element and within the second MEMS element are only effected by a control voltage applied to the single common input.

14. (Previously Presented) The device of claim 13, wherein the first and second MEMS elements each include a fixed electrode and a movable electrode that is movable towards and away from the fixed electrode by application of the control voltage applied to the single common input.

15. (Previously Presented) The device of claim 14, wherein the distance between the fixed and the movable electrode is smaller in the first state than in the second state.

16. (Previously Presented) The device of claim 14, wherein the movable electrode is suspended substantially parallel to the fixed electrode and anchored to a support structure by at least one cantilever arm having a spring constant, each MEMS element further having an actuation electrode with an actuation area for providing the closing and opening voltages.

17. (Previously Presented) The device of claim 16, wherein the first and second MEMS elements each include a dielectric layer having a dielectric permittivity between the fixed and the movable electrode, such that each MEMS element is a MEMS capacitor.

18. (Previously Presented) The device of claim 13, wherein the first MEMS element comprises a first MEMS capacitor and wherein the second MEMS element comprises a second MEMS capacitor such that the electronic device comprises a variable capacitor.

19. (Previously Presented) The device of claim 18, wherein application of the control voltage to the single common input can cause the variable capacitor to take on at least four different capacitance values.

20. (Previously Presented) The device of claim 19, further comprising at least one further MEMS element coupled to the single common input, wherein application of the control voltage to the single common input can cause the variable capacitor to take on more than four different capacitance values.